

**SUBJECT : GRAPH THEORY**  
**TOPIC : DOMINATING SET**

**Dominating Set:**

A subset  $S$  of  $V(G)$  is a dominating set of  $G$  if for every  $v \in V(G) - S$ , there exists  $u \in S$  such that  $uv \in E(G)$

**PG Project:**

Independent outer connected dominating set

A dominating set  $S$  is an Independent outer connected dominating set of  $G$  if

- (i)  $S$ - independent dominating set of  $G$
- (ii)  $\langle V(G) \setminus S \rangle$  is Connected Graph

**Proposal Topic:**

Outer connected vertex edge dominating set

An outer connected vertex edge dominating set for an arb graph  $G$  is a set  $D$  subset of  $V(G)$  such that

- (i)  $D$  is a vertex edge dominating set
- (ii)  $G/D$  – connected.